REMARKS

Applicants respectfully request that the application be reconsidered in view of the above amendments and the following remarks. In the Office Action, dated October 27, 2004, the Examiner rejected claims 1-5, 8-14, 16 and 17 as allegedly being anticipated by U.S. Patent No. 6,084,878 (hereinafter "CRAYFORD"). Applicants note with appreciation the Examiner's indication of allowable subject matter in claims 6, 7, 15, 18 and 19.

By way of this amendment, Applicants have amended claims 7 and 19 to depend from claims 1 and 16, respectively. Claim 1 has been amended to incorporate the subject matter of claim 6, which the Office Action has indicated as being allowable. Claim 16 has been amended to incorporate the subject matter of claim 18, which the Office Action has indicated as being allowable. Claims 10-13 and 15 have been amended to improve form. Claims 6 and 18 have been canceled without prejudice or disclaimer. No new matter has been added by the present amendment. Reconsideration of the outstanding rejection of pending claims 1-5, 8-14, 16 and 17 is respectfully requested in view of the amendments above and the following remarks.

In paragraph 2, the Office Action rejects claims 1-5, 8-14, 16 and 17 under 35 U.S.C. §102(a) as allegedly being anticipated by CRAYFORD. Applicants have amended independent claim 1 to incorporate the subject matter of claim 6, which the Office Action has indicated as containing allowable subject matter. Applicants have further amended independent claim 16 to incorporate the subject matter of claim 18, which the Office Action has indicated as containing allowable subject matter. Withdrawal of the rejection of claims 1 and 16, and claims 2-5, 8, 9 and 17 (which depend from either claim 1 or claim 16), is, therefore, respectfully requested. Applicants traverse the rejection of claims 10-14.

Amended independent claim 10 recites a "method for determining forwarding information for a data frame received by a network device" that includes "receiving, prior to receipt of one or more identified data frames at the network device, forwarding information for the one or more identified data frames from a source external to the network device," "programming a memory to store the forwarding information for the one or more identified data frames," "receiving a plurality of data frames," "analyzing each of the received data frames to determine whether the received data frame corresponds to one of the one or more identified data frames," and "using the stored forwarding information to forward the received data frame when the received data frame corresponds to one of the one or more data frames."

A proper rejection under 35 U.S.C. §102 requires that a reference teach every aspect of the claimed invention. CRAYFORD does not disclose or suggest the combination of features recited in Applicants' amended claim 10. For example, CRAYFORD does not disclose or suggest "receiving, prior to receipt of one or more identified data frames at the network device, forwarding information for the one or more identified data frames from a source external to the network device" and "programming a memory to store the forwarding information for the one or more identified data frames," as recited in claim 10. The Office Action relies on column 5, lines 48-55; column 5, lines 10-16; column 6, lines 25-39; and column 6, lines 39-43 of CRAYFORD for allegedly disclosing the various features of claim 10 (Office Action, pg. 3). Applicants respectfully submit that these sections of CRAYFORD do not disclose or suggest the above-noted features of claim 10.

At column 5, lines 48-55, CRAYFORD discloses:

> The switch subsystem 70 contains the core switching engine for receiving and forwarding frames. The main functional blocks used to implement the switching engine include: a port vector FIFO 63, a buffer manager 65, a plurality of port output queues 67, a management port output queue 75, an expansion bus port output queue 77, a free buffer pool 104, a multicopy queue 90, a multicopy cache 96 and a reclaim queue 98.

This section of CRAYFORD merely discloses the various components in the switching engine of the switch subsystem 70. This section of CRAYFORD does not disclose, or even suggest, "receiving, prior to receipt of one or more identified data frames at the network device, forwarding information for the one or more identified data frames from a source external to the network device" and "programming a memory to store the forwarding information for the one or more identified data frames," as recited in amended claim 10.

At column 5, lines 10-16, CRAYFORD discloses:

> FIG. 2 is a block diagram of the multiport switch 12 of FIG. 1. The multiport switch 12 includes twenty-four (24) 10 Mb/s media access control (MAC) ports 60 for sending and receiving data packets in half-duplex between the respective 10 Mb/s network stations 14 (ports 1-24) and two 100 Mb/s MAC ports 62 for sending and receiving data packets in full-duplex between the respective 100 Mb/s network stations 16 (ports 25, 26).

This section of CRAYFORD merely discloses the various different types of ports of multiport switch 12. This section of CRAYFORD does not disclose, or even suggest, "receiving, prior to receipt of one or more identified data frames at the network device, forwarding information for the one or more identified data frames from a source external to the network device" and "programming a memory to store the forwarding information for the one or more identified data frames," as recited in amended claim 10.

At column 6, lines 25-43, CRAYFORD discloses:

> As described above, the multiport switch 12 provides the switching logic for receiving and forwarding frames to the appropriate output ports. The frame forwarding decisions however, are made by the rules checker, either the IRC 68 or the ERC 44. The rules checker contains a set of addresses along with VLAN associations and forwarding port vectors. When a port on multiport switch 12 receives a frame, it sends a frame pointer (location in external memory 34 where the frame is stored), the receive port number, destination address (DA) and source address (SA) to the rules checker. If the IRC 68 is enabled, the port also forwards hash keys and VLAN ID (if applicable). The rules checker searches its address table for the appropriate addresses and makes a forwarding decision based upon the SA, receive port, DA and VLAN associations. It then forwards the frame pointer, a forwarding port vector, the VLAN index (if appropriate) and a control opcode to the port vector FIFO 63 (See FIG. 3).

This section of CRAYFORD discloses the use of either an internal rules checker (IRC) 68, or an external rules checker (ERC) 44, for making frame forwarding decisions for frames received at multiport switch 12 that are to be forwarded out appropriate output ports to corresponding destinations. As further disclosed in column 6, lines 44-51, IRC 68 provides logic to support 512 user addresses and capabilities for 32 unique VLANs, and ERC 44 supports a much larger number of addresses, VLANs and routing functions. The section cited by the Office Action, and the additional section cited above, disclose the use of either IRC 68, or ERC 44, for generating frame forwarding information for a frame, based on addressing information contained in the frame, after the frame has been received at multiport switch 12. CRAYFORD does not disclose or suggest, "receiving, *prior to receipt of one or more identified data frames at the network device*, forwarding information for the one or more identified data frames from a source external to the network device" (emphasis added) and "programming a memory to store the forwarding information for the one or more identified data frames," as recited in amended claim 10.

For at least the foregoing reasons, Applicants submit that amended claim 10 is not anticipated by CRAYFORD.

Claims 11-14 depend from claim 10 and, therefore, patentably distinguish over CRAYFORD for at least the reasons set forth above with respect to claim 10.

New claim 20 recites a switch that includes "an interface configured to receive first frame forwarding information associated with certain data frames from a source external to the switch prior to receipt of the certain data frames at the switch," "a port filter configured to store the received first frame forwarding information," "a plurality of input ports configured to receive a plurality of data frames," "wherein the port filter is further configured to: identify the data frames of the received plurality of data frames that are the certain data frames, retrieve the stored first frame forwarding information associated with the certain data frames, and use the stored first frame forwarding information to forward the certain data frames," and "a forwarding unit configured to: perform a forwarding lookup for data frames of the plurality of data frames not identified as the certain data frames to generate second frame forwarding information, and use the second frame forwarding information to forward the data frames not identified as the certain data frames.

As discussed above with respect to claim 10, CRAYFORD merely discloses the use of either IRC 68, or ERC 44, for generating frame forwarding information for a frame, based on addressing information contained in the frame, after the frame has been received at multiport switch 12. CRAYFORD does not disclose or suggest "an interface configured to receive first frame forwarding information associated with certain data frames from a source external to the switch *prior to receipt of the certain data frames at the switch*" (emphasis added) and "a port

filter configured to store the received first frame forwarding information," as recited in new claim 20. Applicants, therefore, submit that claim 20 patentably distinguishes over CRAYFORD for at least these reasons.

In view of the foregoing amendments and remarks, Applicants respectfully request the Examiner's reconsideration of this application, and the timely allowance of the pending claims. To the extent necessary, a petition for an extension of time under 37 CFR § 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account No. 50-1070 and please credit any excess fees to such deposit account.

Respectfully submitted,

By: _____

Glenn Snyder
Registration No. 41,428

Date: January 26, 2005

Harrity & Snyder, L.L.P.
11240 Waples Mill Road
Suite 300
Fairfax, Virginia 22030
Main: (571) 432-0800
Direct: (386) 575-2713

Customer Number: **45114**